

**Protocol
For
Incidental Take Authorization**

Blanding's Turtle (*Emydoidea blandingii*)

Note

If carrying out a given protocol is not feasible, or multiple listed species in a given management area pose conflicts, contact the Bureau of Endangered Resources at 608/264-6057. Staff in BER will work with Integrated Science Services (Research) staff, species experts and managers to establish an acceptable protocol for a given site that will allow for incidental take without further legal Consultation or public notice

I. Species Background Information

A. Status

State Status: Threatened.

USFWS Region 3 Species of Management Concern: Yes

Number of Known WI Sites: 122; in Wisconsin it occurs in every county except four in the northern hardwoods region adjacent to Lake Superior.

Global Range: Southern Ontario and northwest Pennsylvania west to central Minnesota, Nebraska and south into central Illinois.

B. Habitat

General Habitat Description: Prefers shallow to deep marshes dominated by moderate to dense submergent vegetation and often co-dominated by emergent vegetation (usually cattails) along the shorelines. May also be found in almost every other wetland type excluding northern bogs and oligotrophic lakes. Strongly prefers lentic water although individuals will use riverine corridors for travel and hibernation. As a semi-terrestrial species, Blanding's often forage in wet prairies, sedge meadows or shrub-carrs adjacent to aquatic habitats. (See "Nest Location" below.)

Over-wintering Habitat: Blanding's utilize a wide variety of aquatic habitats for hibernation ranging from small ponds with less than 30 inches of water to trout streams, bays of lakes and drainage ditches. They have a preference for

mucky bottoms, although some individuals may not burrow in but remain semi-active throughout the winter, moving about under the ice.

C. Life History

Home Range: Home range is highly variable and is quite dependent on the availability and proximity of foraging, hibernation and nesting sites. Blanding's are semi-terrestrial and will often move between different wetlands throughout the active season.

Communal Behaviors: NA

Site Fidelity: Blanding's often exhibit nest-site fidelity.

Nest Location: Blanding's do not nest communally. Many herpetologists have observed nest-site fidelity they believe is associated with the turtle's natal hatching site, although this has not been documented. Nesting occurs from along the shoreline to > 1.5 miles from aquatic habitat. They have a strong preference for nesting in sandy soils, which may partially explain why they travel so far from water to nest.

Breeding: Blanding's turtles may breed in any month but primarily breed in spring and fall. They are the slowest to mature of all the North American freshwater turtles, taking 16-20 years in Wisconsin.

Nesting Period: Nesting usually occurs from early-mid June but may occur as early as May 20 or as late as early July. Most nesting begins around dusk. Females can produce one viable clutch of eggs annually, but the majority typically lay eggs in alternating years (every other year). Eggs generally hatch in 60-80 days in WI (early August through September). Blanding's have not been documented to overwinter in the nest.

Activity periods:

Seasonal: Blanding's become active as soon as ice begins to recede in March and April and they can be seen basking along or adjacent to open shorelines on sunny days when temperatures reach about 50°F. Shortly after emergence, they seek out shallow aquatic environments due to warmer water and increased foraging opportunities. Gravid females will often bask for extended periods in the spring to speed egg development. During the heat of summer, especially during extreme heat, Blanding's may aestivate, becoming inactive in either an aquatic or terrestrial habitat. They begin heading for overwintering sites during September and hibernate in October.

Daily: Blanding's usually are active during the day, beginning with morning foraging.

II. Management Protocols For Authorizing Incidental Take

If the management activity is for the purpose of recovering, maintaining or improving the grassland, prairie or savanna ecosystem that includes habitat for Blanding's turtles, then incidental take is allowed if these conditions are followed.

If incidental take of Blanding's turtles occurs from the activity, please notify BER so we can reevaluate this guidance.

A. **Burning:**

Spring or Fall burning is allowed under the following conditions:

1. If spring or fall burning will occur when temperatures are below 50°F, or above 50°F but overcast, then there are no restrictions.
2. If spring or fall burning will occur when temperatures are at or above 50°F and skies are sunny to partly cloudy, then wetlands where Blanding's are known or suspected to occur should be surveyed immediately prior to burning to locate and move ("rescue") specimens (e.g., place in the water).*

Surveys involve a walk along the perimeter of each affected wetland searching for turtles basking in the vegetation within a border extending approximately 15 feet inland from the existing surface water area. On most properties, these surveys can be done with minimal time and effort. If conducting the burning will take several hours, it may be advantageous to burn a buffer area around the wetland (15-20 feet wide) following surveys, to minimize take. **Contact Bob Hay in BER if these "rescue" surveys are not practicable.*

B. **Mowing/Haying:**

For mowing that may occur in upland sandy habitat suitable for nesting:

1. If done between July 6 and May 19, there are no restrictions.
2. If done between May 20 and July 5, conduct mowing only during the hours of 10 a.m.- 5 p.m..

C. **Selective Brush/Tree-cutting:**

Non-mechanical brush and tree cutting (i.e., chain saw) may be done without restriction.

D. Grazing:

If light-to-moderate grazing (0 to < 1.0 head per acre) is used during the nesting and incubation period (May 20-September 30) there are no restrictions. For heavier grazing, contact BER.

E. Herbiciding:

In areas where Blanding's turtles are suspected or known to nest, herbiciding should be conducted as follows:

Spot treat herbaceous vegetation, preferably with a low persistence/short half-life herbicide (i.e. Round-up®), and apply by wick, sponge or hand-held spray application. Avoid broadcast applications.

Use basal bark or cut-stump-treatment methods when controlling woody vegetation.